Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
AU251 **West** **1/4-1/2** **0.372 mi.** **1966 ft.**	**FORMER QUADROZZI CONCRETE** **1705-1739 HART PLACE/3068 CROPSEY AVE** **BROOKLYN, NY 11224** **Site 2 of 2 in cluster AU**	**NY Spills**	**S113817668** **N/A**

Relative:
Higher

Actual:
7 ft.

SPILLS:

Name:	FORMER QUADROZZI CONCRETE
Address:	1705-1739 HART PLACE/3068 CROPSEY AVE
City,State,Zip:	BROOKLYN, NY 11224
Spill Number/Closed Date:	1302469 / Not Reported
Facility ID:	1302469
Facility Type:	ER
DER Facility ID:	438131
Site ID:	482905
DEC Region:	2
Spill Cause:	Unknown
Spill Class:	C4
SWIS:	2401
Spill Date:	2013-05-30
Investigator:	JAKOLLEE
Referred To:	APPRVD SOCKS INSTEAD OF SKIMMERS 6/27/19
Reported to Dept:	2013-06-07
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	1
Date Entered In Computer:	2013-06-07
Spill Record Last Update:	2019-07-08
Spiller Name:	Not reported
Spiller Company:	QUADROZZI CONCRETE
Spiller Address:	1705-1739 HART PLACE
Spiller Company:	999
Contact Name:	DUSTIN KAPSON
DEC Memo:	"06/06/13-Hiralkumar Patel. 3:36 PM:- received email from Dustin Kapson from AKRF inquiring about old spill # 9206921 at 3100 Cropsey Ave/1705 Hart Place. Dustin Kapson AKRF, INC. Ph. (646) 388-9767 Fax (212) 726-0942 email: dkapson@akrf.com 3:40 PM:- spoke with Dustin.

he mentioned that last week AKRF installed some monitoring wells in area where old heating oil storage tank was located along Hart Place. yesterday during well gauging, they noticed free phase product. he believe product is heating oil. Dustin inquired if old case be re-opened or a new spill case be assigned to this findings. asked him to report new spill number. 06/07/13-Hiralkumar Patel. subject spill called in today. 11:08 AM:- received email from Dustin. he received data and preparing table/maps. he mentioned that site under investigation is on Block #: 6992 / Lot #s: 120, 128 and 132. summary from spill # 9206921 (report on e-docs for 9206921):
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-*-*-*-*-*-* according to Sanborn Maps, the site was utilized by the Valvoline Oil Co. as per 1950 Sanborn map, an aboveground 720,000 gal oil storage tank was located north of Hart Place. oil storage tank from the 1950 map was not present on the 1977 map. during subsurface investigation in Apr. 1994, four soil borings were installed to

groundwater depth which was found at 6 ft bg. during investigation, found high PID values in SP-2 (more than 1,000 ppm at 4-6 ft) and SP-4 (240 ppm at 1-3 ft). two soil samples were analyzed; both samples were collected from boring SP-2: one from 2-4 ft and another from 4-6 ft. soil analyticals: ----------------------SP-2 4-6 ft
Benzene------------------45 Toluene------------------83
Xylene------------------534 MTBE--------------------190
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-*-*-*-*-*-* 3:57 PM:- received email from Dustin including site map and sample results. found some SVOC contamination. found high Mercury in some samples (highest 25 ppm Mercury in soil sample SB-2 at 3-4 ft depth). found some VOCs in groundwater samples (max. 280 ppb Naphthalene, but other compounds less than 40 ppb). total six wells installed. Dustin mentioned that groundwater samples were not collected from wells MW-2, MW-4 and MW-6, due to presence of product. wells MW-2, MW-4 and MW-6 are located along the western edge of the property, adjacent to coney island creek. 4:01 PM:- sent email to Dustin and asked him about product thickness in each well. also asked him to collect product sample for fingerprint analysis, if not done yet. 4:08 PM:- received email from Dustin. he mentioned that fingerprint analysis was done and product was classified as degraded fuel oil. Dustin included product thickness information on map. found sheen/oil staining in MW-4, 0.18 ft product in MW-2 and 2.57 ft product in MW-6. well MW-4 is located between MW-2 and MW-4. well MW-6 is located within couple of feet from creek. 4:11 PM:- spoke with Dustin confirming product thickness in wells. he mentioned that product thickness measured in feet. based on data, highest amount of product found in well which is only couple of feet from creek. to confirm product thickness in wells, asked Dustin to re-gauge the wells and remove product from wells. then re-gauge after week to see how much recharged. scheduled a site inspection at 10 AM on 06/13/13 for well re-gauging and product removal. 06/13/13-Hiralkumar Patel. 7:55 AM:- received email from Dustin requesting to reschedule site inspection due to rainy weather. 8:02 AM:- spoke with Dustin and rescheduled site inspection at 10 AM on 06/18/13. 06/20/13-Hiralkumar Patel. 10:00 AM:- visited site. met Dustin and Christopher Lynch (Storage Deluxe). checked all six wells. product found in wells MW-2 (0.56 ft), MW-4 (1.01 ft) and MW-6 (2.6 ft), more than what found last time. asked Dustin to remove product from wells and re-gauge after a week. asked him to submit boring/well logs for review, as report will be prepared after any additional required investigation

is completed. discussed with Mr. Lynch about further investigation required to locate source. asked Mr. Lynch to provide current property owner's contact information. Mr. Lynch mentioned that Storage Deluxe is in final stage of buying this property and has no plan to back off based on environmental results. he mentioned that site will be raised about 6 ft and then a 7 story storage building will be buillt in middle part of the site. area of former Hart Place and rear of the site will be open grass area. parking lot and loading docks will be towards front of the site. Christopher Lynch Storage Deluxe 25-15 Queens Plaze North, 2nd Floor Long Island City, NY 11101 Ph. (718) 862-3625 (O) (516) 852-5234 (C) Fax (718) 361-5710 email: clynch@storagedeluxe.com discussed with DEC Austin. based on historical use of the site (including 720,000 gal tank at site) and results of recent investigation (2.5 ft product on groundwater), Austin asked to transfer case to DEC Carlson for assignment to her staff member. discussed with DEC Carlson regarding project transfer. case assigned to DEC Carlson. 12:56 PM:- sent email to DEC Carlson informing case transfer. email copied to DEC Hussein and DEC Austin.

review spill # 9206921 for more details and older reports. 06/24/2013: Emailed letter to Dustin Kapson requesting a Groundwater Monitoring Well Summary Report and an Investigation Work Plan to further delineate the extent of contamination.-CM 07/03/2013: Rec'd call and the email copied below from Dustin Kapson regarding DEC's June 25, 2013 letter requesting an Investigation Work Plan within 30 days. Thank you for your letter. I have reached out through phone calls and left you voicemail in an effort to further discuss the status of the spill investigation at the property. As it currently stands, our client (the prospective purchaser) has not finalized their deal with the current owner. Unfortunately, we do not have a good feel for how quickly this transaction will occur nor do we have access to the property to perform any additional gauging or product recovery from the existing monitor wells. Our client (cc'd on this message) fully intends to perform any necessary additional investigation, remediation and reporting to satisfy NYSDEC requirements after the real estate transaction has been completed and ownership of the property is obtained. Based on conversations with Mr. Patel during the site meeting on June 20, 2013, we anticipate the need to advance additional borings and collect additional samples to delineate groundwater conditions at the property, and would prefer to perform these investigation activities prior to providing a report of findings to NYSDEC. We will continue to stay in touch with you regarding the status of the project. I advised Mr. Kapson that since his client is not the owner, the NYSDEC doesn't require that they submit a work plan for our approval, but that it may be in their interest to submit the work plan to us in case there is information missing that we would ask them to provide after their investigation is completed. Also, since Mr. Kapson's client is not the property owner and has no access to the site as stated in the email, we are not requiring a response to our 6/24/2013 letter at this time. I advised Mr. Kapson that when his client takes ownership of the property the new owner would be repsonsible for remediating the site. Mr. Kapson stated that he has worked with his client on similar projects and that his client is well aware that it would be his (the Client's) responsbility to remediate the site.-CM 08/07/2013: Letter sent by certified mail to John Quadrozzi of Crospey Avenue Land Enterprises, LLC., with Stipulation Agreement and Advising of Open Spill. Response due September 9, 2013. Copy emailed to Dustin Kapson

of AKRF, consultant for the prospective buyer. 10/03/2013: Received unsigned, unopened letter with post office sticker noting return to sender. Attempted-not known. Unable to forward. 10/15/2013: Sent second Notice of Open Spill and Stipulation Agreement to property owner for Spill Case 1302469, 1703-1739 Hart Place, Brooklyn. The letter was originally sent to property owner in August 2013 and response was due in September 2013, but was returned unopened and unable to forward . There was a mistake in the zip code provided to the Department. After consulting with John Urda, the letter was resent to the property owner using the corrected zip code information. If not accepted, the letter will be delivered by an ECO. THird letter not sent. 10/31/2013: Per Hassan Hussein, must arrange meeting/call with Owner before attempting delivery by ECO. No tel number in files. 12/12/2013: Case to be transferred to special program for clean up related to 2012 Hurricane Sandy. 12/16/13 - Raphael Ketani. The spill case was transferred to me effective today. The spill case will remain in Unit C in Region 2 Remediation. I checked ACRIS for the owner of the site at 1705 Hart Place (1739 Hart Place does not exist in ACRIS) for block 6992 and lots 120, 127, 128 and 132. This turned out to be FAE Holdings, LLC 390783R, c/o First

American Exchange Company, LLC, 554 South 300 East, Ste 200, Salt Lake City, UT, 84111. From spill case #9206921, the contact is Mark Bullock at (801) 578-6852. The 6/5/08 notes from spill case #9206921 indicate that FAE Holdings (title company) was created by Quadrozzi Realty Corp. A 1031 exchange took place and now Quadrozzi Realty Corp. owns Quadrozzi Concrete. Quadrozzi Realty Corp. receives their mail at P.O. Box 920179, Arverne, NY, 11692. They do business through their lawyers Paykin Greenblat Lesser and Kreig (Joe Paykin at (212) 725-4428, 7th Floor). James Klatsky at 185 Madison Avenue, 10th Floor, Manhattan, NY, 10016 also needs to be notified. A case note dated 12/23/11 indicates the law firm as Paykin Mahon Rooney and Kreig, LLP, 185 Madison Avenue, 10th Floor, Manhattan, NY, 10016. Next, I checked for any PBS cases that are or were related to the site. I checked for Valvoline Oil, Great Eastern Fuel, Greco Brothers, Valente Concrete and Quadrozzi Concrete, but didn't find anything. I found a note that was left in the paper file by the previous case manager, Cris-Sandra Maycock. The note read: Quadrozzi Enterpises, Inc., 699 Columbia Street, Brooklyn, NY, 11231 (718) 782-3769/e-mail info@quadrozzi.com. The Web address is: www.quadrozzi.com/realestateindustrial/cicxconeyislandcreekterminal.html. A 12/23/11 note from spill case #9206921 contained the address: Quadrozzi Concrete Corp., 73-02 Amstel Blvd., Arverne, NY, 11692-0179, Attn: John Quadrozzi Jr./Catherine Quadrozzi, (718) 474-4333, e-mail cq@quadrozziconcrete.com. According to the NYS Corporation Database, 73-02 Amstel Blvd. is the same address for Quadrozzi Inc. The prospective buyer is Storage Deluxe. The contact is: Christopher Lynch, Storage Deluxe, 25-15 Queens Plaze North, 2nd Floor, Long Island City, NY 11101 Ph. (718) 862-3625 (O) (516) 852-5234 (C) Fax (718) 361-5710 email: clynch@storagedeluxe.com According to the Region 2 Office of General Counsel, as FAE Holdings, LLC is the deed holder, then they are the land owner. So, I sent a Stipulation Agreement to them with a deadline of January 17, 2014 for submission of the signed Stip. I added to the cover letter that if the signed Stip is not received by the deadline, then the State will take over the spill case and do the investigative and remedial work. 12/18/13 - Raphael Ketani. I spoke to Joe Paykin of Paykin Mahon Rooney and Kreig, LLP (212) 725-4428. He said that FAE Holdings, LLC had changed its name to Cropsey Avenue Land Enterprises, LLC. I looked up the name in the NYS Corporation database and found the address of the company as 699 Columbia Street, Brooklyn, NY, 11231. 12/20/13 - Raphael Ketani. Certified Letters containing the same Stipulation Agreement package as was sent to FAE Holdings, LLC were sent to the following entities: Cropsey Avenue Land Enterprises, LLC and Quadrozzi Realty Corp. both c/o Paykin Mahon Rooney and Kreig, LLP Quadrozzi Concrete Corp., 73-02 Amstel Blvd., Arverne, NY 11692-1079, Attn: John Quadrozzi, Jr./Catherine Quadrozzi Quadrozzi Enterprises, Inc., 699 Columbia Street, Brooklyn, NY 11231 Quadrozzi Inc., 73-02 Amstel Blvd., Arverne, NY 11692-0179, Attn: John Quadrozzi, Jr./ Catherine Quadrozzi 12/23/13 - Raphael Ketani. Mr. Bullock called this morning (801) 578-8851. He said that he had received the Stipulation Agreement package for FAE Holdings, LLC and that he was forwarding it to Mr. Paykin. 1/3/14 - Raphael Ketani. I received the green return card for the Stip Package that was sent to FAE Holdings, LLC, c/o First American Exchange Company, LLC. 1/6/14 - Raphael Ketani. Today I received the envelope for the Stip Package that had been sent to Quadrozzi Concrete Corp. at 73-02 Amstel Blvd., Arverne. The envelope was unopened and the post office label indicated that there was insufficient address. 1/23/14 - Raphael Ketani. As I still had not received the signed Stipulation Agreement,

nor any other unopened envelopes which contained the Stipulation Agreement, I tried to contact Mr. Paykin (212) 725-4428 regarding the Stip package that had been sent to Cropsey Avenue Land Enterprises, LLC. However, I could only leave a message that the DEC wanted to know whether the signed Stipulation was going to be sent to the DEC. 1/24/14 - Raphael Ketani. I tried to contact Mr. Paykin today, but could only leave a voice message. I sent an e-mail to Christopher Lynch (718) 862-3625 (O)/(516) 852-5234 (C) of Storage Deluxe, the prospective buyer. In the e-mail, I asked whether he had an e-mail address for Mr. Paykin and a legal name for the entity that presently owns the former Quadrozzi Concrete site. Later, I received a call from Michael Bogen from Sieve Paget and Riesel (917) 295-6449, the attorney for Storage Deluxe. He told me that he did not know what the business entity was who owned the former concrete plant. He just knew the other party as Mr. Quadrozzi. Mr. Bogen stated that Storage Deluxe had entered into a contract to buy the property from Mr. Quadrozzi. However, Mr. Quadrozzi refused to honor the contract to sell to Storage Deluxe, even though, Mr. Milken said, they had paid Mr. Quadrozzi a large deposit. Mr. Quadrozzi was now trying to sell the property to anyone else. Though, some months ago, Storage Deluxe went to court to get a restraining order against Mr. Quadrozzi. Storage Deluxe was successful in this respect and the judge said that Mr. Quadrozzi had to honor the contract and couldn't sell the property to anyone else. So, now, Storage Deluxe is scheduled to go to court again within a few months time. Mr. Bogen said that this legal process has been going on for a year. Mr. Bogen said that Mr. Paykin has been difficult to get ahold of. However, he gave me his e-mail address: jpaykin@hhk.com. I thanked Mr. Bogen for the information and the conversation ended. After this, I sent Mr. Paykin an e-mail informing him that the deadline for returning the Stipulation Agreements for Cropsey Avenue Land Enterprises, LLC and Quadrozzi Realty Corp. had expired on January 17, 2014 and that they were in violation of their respective Stipulation Agreements. Not long after sending the e-mail to Mr. Paykin, John Quadrozzi, Jr. sent me an e-mail stating that he had just received the Stip package on

1/23/14, that there was nothing to clean up and that the oil spill was the fault of a neighbor. After this, he sent me another e-mail asking to talk to me. 1/27/14 - Raphael Ketani. I tried to call Mr. Quadrozzi today (347) 924-5757/JQjr@Quadrozzi.com (marketing company QUE Quadrozzi Urban Enterprises, Inc., 691 Columbia Street, South Red Hook, Brooklyn, 11231). However, I could only leave a voice message. Therefore, I responded to his second e-mail that was received on 1/24/14. I wrote that the title company had received the Stipulation Agreement and had sent it to Mr. Paykin on 12/23/13. I also wrote that Stipulation Agreements had been sent to Cropsey Avenue Land Enterprises, LLC and Quadrozzi Realty Corp. c/o Joe Paykin (212) 725-4428 back on 12/20/13. So, he should have received them some time ago. I finished the e-mail by granting Mr. Quadrozzi more time to return the signed Stips. I set the deadline as February 14, 2014. 1/28/14 - Raphael Ketani. Today I received the unopened envelope containing the Stipulation Agreement package that was sent to Quadrozzi Inc. at 73-02 Amstel Boulevard, Arverne, NY. The yellow USPS sticker indicated Attempted - Not Known, Unable to Forward. 2/5/14 - Raphael Ketani. Today I received a green return card for the envelope which had contained the Stipulation Agreements for Cropsey Avenue Land Enterprises, LLC and Quadrozzi Realty Corp. These Stips had been sent to Mr. Quadrozzi's lawyer, Joe Paykin. The card had been signed by Jones and dated 12/23/13. 5/29/14 - Raphael Ketani. As there has been no contact from Mr. Quadrozzi, Jr., nor the submission

of the Stipulation Agreements, I sent an e-mail to Region 2 legal notifying them that there has been no progress on the case. 6/23/14 - Raphael Ketani. Today I received the unopened envelope containing the Stipulation Agreement package that was sent to Quadrozzi Enterprises Inc. at 699 Columbia Street, Brooklyn. The yellow USPS sticker indicated Return to Sender, Unclaimed, Unable to Forward. 7/8/15 - Raphael Ketani. I received an email today from Steve Novenstein, President, Storage Deluxe Realty (26 W. 17th Street, Ste. 801, NY, NY, 10011, (212) 904-0406, snovenstein@storagedeluxe.com). He stated that Storage Deluxe had succeeded in buying the property. He wanted to set up a meeting to discuss the environmental work that should take place at the site. I responded to his email and wrote the dates when the DEC could visit the site and have a meeting. 7/10/15 - Raphael Ketani. Graham Tedesco, Director - Acquisitions and Development, Storage Deluxe Realty [(646) 780-5235/cell (518) 331-1671/gtedesco@storagedeluxe.com], sent me an email yesterday regarding the meeting date. I sent him a response email confirming that the upcoming meeting will held onsite on July 15th. Mr. Tedesco is the contact person for Storage Deluxe and Michelle Lapin is the consultant from AKRF. I checked the ACRIS property database. The property was sold to 3068 Cropsey Ave, LLC on 6/16/15. The address of Cropsey Ave LLC is 26 W. 17th Street, Ste. 801, Manhattan, 10011 - the same as one of the Storage Deluxe offices. The block and lot are 6992 and 132. 7/15/15 - Raphael Ketani. The site meeting took place as planned. The buses that had been stored on site were gone. The property was mostly open area. In attendance were Mr. Lynch (25-15 Queens Plaza North, 2nd Floor, LIC, 11101/clynch@storagedeluxe.com), Mr. Tedesco (26 W. 17th Street, Ste. 801, Manhattan, 10011), another person from Storage Deluxe, a representative from the drilling contractor and Ms. Lapin from the consulting company AKRF. Ms. Lapin and Mr. Lynch talked to me about the site and the development plans. Ms. Lapin and Mr. Lynch stated that Storage Deluxe will raise the site 6 feet and then build a 7 story building slab on grade. I asked

Ms. Lapin about the bulkhead with Coney Island Creek. She said that they did an inspection by canoe some time ago before the property was sold to Storage Deluxe. There is an old wooden bulkhead behind a steel one. However, the bulk heading is missing in some places. She added that the Region 2 DEC Division of Marine Resources wants Storage Deluxe to remove the bulkhead and instead construct a slope covered in rip rap. I asked her about the coal silos in the western part of the site, the garage with the acetylene tanks, the shack and the office trailer. She and Mr. Lynch said that this will all be removed and the acetylene tanks will be disposed of properly. Ms. Lapin stated that there still was product in the wells along the Coney Island Creek side of the site. She said that the product had come from the 720,000 gal. #2 oil AST that had leaked. I looked in the creek, but did not see a sheen. I told Mr. Lynch and Ms. Lapin that the SHELL station across Hart Place from the site had a spill. Ms. Lapin stated that the wells on the south side of the site along Hart Place did not have product in them. Next, I told Mr. Lynch and Ms. Lapin what the DEC was expecting to see in an investigation of the site. I mentioned that all oil contaminated fill needed to be removed, but not fill which is free of contamination. I added that they should try evacuating the wells and see whether they fill with product again. If they do, then product recovery should take place about once a week until there is only a thin layer. Ms. Lapin said that the DEC will receive the Phase II report for the investigative work which had taken place before Storage Deluxe had bought the property. With that, the meeting ended. Later, I sent an email to Mr.

Lynch stating that the groundwater quality had to be at least as good as the limits for the type of water that was in Coney Island Creek. I also wrote that Storage Deluxe must aim for cleaning up the site to the CP-51 unrestricted residential soil standards, even though the site is commercial. 8/6/15 - Raphael Ketani. I reviewed the AKRF July 2013 Subsurface Phase II Investigation Report. A Phase I ESA was previously prepared by Quay Consulting, LLC (c. 2006?). Lots 120 and 128 used to contain stockpiles of sand, gravel and crushed concrete. Lot 132 had an active concrete plant. Three 275 gals. ASTs with #2 oil used to be present on the site. There were also 13 300 gals. plastic ASTs with a concrete mix at the plant. Additional ASTs were present in the maintenance building, but the contents were unknown. A Safety Kleen recycling sysem and two 10 gal. containers of solvents were also seen in the maintenance building. Three 60 gals. drums with a concrete mixture and nine 55 gals. drums with unknown liquids inside were found in lot 120. There was no evidence of any spills or leaks. AKRF did a Phase I ESA. The site used to serve as an area for brick, cement, coal, sand and stone storage and processing facility. At first, it was an oil storage facility and then later a concrete plant. During 7/24/12 and 7/25/12, 10 soil borings were performed. Ten soil samples and 8 groundwater samples were collected. The 10 borings performed during July 2012 were SB-1 to SB-10. Historical fill was encountered down to 10 feet bgs. The soil samples were tested for VOCs, SVOCs, total metals and PCBs (Aroclor). Samples were taken from SB-5, 8 and 9 for fingerprint analysis of the oil. Also, temporary wells (1 I.D.) were installed at SB-1 to 6, 8 and 9. Sheen was seen on the groundwater at SB-5, 6, 8 and 9. A follow up investigation was performed during May 2013. Twenty four borings, 12 at each location, were performed in the vicinity of SB-2 and SB-8 in order to delineate the metals concentrations. Six permanent wells were also installed during this time. Historical fill was encountered

down to 8 feet bgs. The six wells installed during May 2013 were MW-1 to MW-6 (2 I.D.). They were drilled to either 15 feet bgs or 17 feet bgs. Groundwater was found at 7.5' to 8.5' bgs. The wells were sampled 1 week after installation. No product was seen in MW-1, 3 and 5. About 0.18' of product was seen in MW-2, 2.57' of product in MW-6 and sheen and globules in MW-4. Free phase product was sampled during July 2012 and was determined to be either #2 oil or diesel fuel. AKRF recommends: limited subsurface disturbance for utility installation, no basement, an additional investigation with groundwater monitoring and product collection, a vapor barrier below the slab, and an geophysical survey for additional buried tanks or structures. Any USTs encountered would be registered. Any dewatering performed should be as per the NYCDEP sewer discharge permit. Additional groundwater testing and possibly pre-treatment may be necessary in order to comply with the NYCDEP requirements for the discharge permit. Soil analyticals: borings performed 7/24/12 to 7/25/12; SB-1(1'-2'), SB-2(3'-4'), SB-3(1'-2'), SB-4(4'-5'), SB-5(1'-2'), SB-6(5.5'-6.5'), SB-7(6'-7'), SB-8(3'-4'), SB-9(4.5'-5.5'), SB-10(1'-2'). While Table 1 was missing, the analytical data package included with the report showed that the VOCs were tested for. The VOC results were almost entirely non-detect for all of the SB series of samples. SB-6 did have some high hits, but this was expected in fill in an industrial area. The SVOCs were almost entirely non-detect with some benzo series and combustion product hits. Total metals results for the sample from SB-2 had a low mercury exceedence of 25 mg/kg (0.18 mg/kg unrestricted residential soil standard). SB-1 had 0.27 mg/kg of mercury. SB-3 had 0.35 mg/kg of mercury. SB-4 had 0.23 mg/kg of mercury. SB-5 had 0.22 mg/kg. SB-6 had 0.32 mg/kg. SB-8 had a lead

exceedence of 5700 mg/kg (63 mg/kg unrestricted soil standard). SB-10 had 290 mg/kg of lead. Samples from the delineation borings in the vicinity of SB-2 and SB-8 contained 6.1 mg/kg of mercury at SB-2C. SB-2F had 6.2 mg/kg. SB-2H had 7.1 mg/kg. SB-2I had 17 mg/kg of mercury. SB-2K had 7.4 mg/kg. SB-2L had 14 mg/kg. As regards lead, SB-8A had 140 mg/kg. SB-8E had 3100 mg/kg. SB-8L had 200 mg/kg. Regarding the Aroclor series of analytes, SB-3 had 0.181 mg/kg (0.1 mg/kg unrestricted residential soil standard). SB-10 had 1.37 mg/kg and 0.95 mg/kg of Aroclor 1248 and 1254, respectively. Groundwater analyticals: wells installed 7/24/12 to 7/25/12. Temporary wells (1 I.D.) were installed at SB-1 to SB-6 and SB-8 and SB-9. Permanent wells MW-1 to 6 (2 I.D.) were installed during 5/24/13. Only wells MW-1, 3 and 5 were sampled as product was found in the other wells. The VOC results for all of the wells were almost entirely non-detect, except for a small number of low to moderate exceedences up to 44 ppb of benzene in the sample from MW-1 and 280 ppb in the sample from SB-1. The SVOC results were mostly non-detect with a lesser amount of mostly low exceedences. There were some high exceedences for the benzo series of analytes and hits for some analytes in the P and A series. However, the results were characteristic of historical fill.
For the unfiltered total metals results for mercury, the SB series of samples had exceedences from 1.3 ppb to 6.1 ppb (GA standard 0.7 ppb). SB-9 had 176.2 ppb of mercury. The MW series of samples were well below the 0.7 ppb limit. Lead was 114,600 ppb in SB-1 (GA standard 25 ppb), 1925 ppb in SB-2, 2676 ppb in SB-6, 1113 ppb in SB-8 and 17,060 ppb in SB-9, and well above the GA standard in the other SB series samples. The MW wells were below the 25 ppb GA standard for lead. The rest of the total metals results for SB-1 to SB-6, SB-8 and SB-9 showed the characteristic very high exceedences

of the GA drinking water standards for calcium, magnesium, manganese, potassium and sodium, which is typical of seawater. Dissolved metals results for mercury were 0.8 ppb in SB-9. There were no other mercury hits for any of the other well samples. Dissolved lead was 158.8 ppb at SB-1 and 646.4 ppb at SB-9. There was one other lead hit, but no exceedences for any of the other samples. The rest of the SB sample results for the other dissolved metals were mostly non-detect, except for the usual seawater analytes and one very high exceedence of iron. The MW series of samples had one very low lead hit and a high (279.8 ppb) arsenic exceedence. The MW series of samples were tested for arsenic, barium, cadmium, chromium, selenium and silver, but were mostly non-detect or had very low hits. The only comments I had regarding the report was that Table 1 (soil VOC analyses) was missing and that the soil borings appeared to be too shallow to characterize the soil/fill chemistry. I sent an email requesting these results.
8/7/15 - Raphael Ketani. Ms. Lapin (646) 388-9520/mlapin@akrf.com responded by email to my 8/6/15 email. She attached Table 1 for soil VOCs and the other tables to Table 8: The original borings were advanced to two feet below the water table, which was around 6-8 feet below grade throughout the site (the borings were advanced to 8 feet if the groundwater table was encountered at 6 feet below grade and to 10 feet if the groundwater table was encountered at 8 feet below grade). SB-7 met refusal on fill or a former foundation at 7 feet below grade and SB-10 met refusal on concrete at 2 feet. The SB-2 and SB-8 series of borings were added to delineate metals contamination in these two areas and were all advanced to 8 feet. The SB-2 group was to delineate mercury contamination detected in the original SB-2 boring; groundwater was detected at 6 feet below grade in these borings. The SB-8 series was to delineate an elevated lead concentration in the original SB-8 boring; groundwater was detected

at 6 feet below grade in this area as well. 8/20/15 - Raphael Ketani. Axel Schwendt (646) 388-9529/aschwendt@akrf.com)sent me the following email today: Below is the scope of work we are proposing for the next phase in addressing the spill. Please let me know if you have questions or concerns. Geophysical Survey AKRF will conduct a geophysical survey, including ground-penetrating radar (GPR), to investigate the potential presence of underground storage tanks (USTs). GPR uses electromagnetic wave propagation and scattering to image and identify changes in electrical and magnetic properties in the ground. This task will also include a magnetometer survey to confirm the presence and location of any USTs. Magnetometers measure irregularities in the magnetic field in a given area. To conduct the proposed activities, it is important that the site is cleared of stored materials to the extent feasible. The geophysical survey is estimated to take one full day to complete. The scope does not include disturbance (excavation) of the subsurface to confirm the presence of any tanks or other subsurface magnetic anomalies detected during the GPR or magnetometer surveys. If a potential UST is identified, the area will be marked on the ground surface. In addition, the location of the anomalies will be added to a site plan. Waste Oil/Drum Removal The following drums, cylinders and tanks were observed on-site: - 5 250 gallon tote tanks of waste oil (4 nearly full, 1 mostly empty) - 6-7 drums of oil and/or grease - 5-6 5-gallon pails of oil or grease - 2 acetylene cylinders - 1 oxygen cylinder AKRF will have the waste oil from the tote tanks, drums and pails pumped out using a vacuum truck. Any sludge and grease will be consolidated into drums for disposal; for this proposal we ve

estimated that two drums will be generated. The oil and drums will be manifested to disposal facilities. The tote tanks will be removed off-site for disposal. The cylinders will be returned to a cylinder facility. Soil and Groundwater Sampling AKRF proposes to advance up to 23 borings using a Geoprobe drill rig in the area of the observed LNAPL at monitor wells MW-2, MW-4 and MW-6. The borings will be advanced to 1 to 2 feet into the water table. Soil cores will be obtained and field-screened using a photoionization detector (PID) for VOCs. At each location, AKRF field personnel will record and document subsurface conditions. Up to one soil sample will be collected from each boring based on observations (e.g., odors, staining or elevated PID readings). Soil samples slated for laboratory analysis will be placed in laboratory-supplied containers and shipped in accordance with appropriate EPA protocols to a New York State Department of Health (NYSDOH)-certified laboratory. The samples will be analyzed for the CP-51 list of VOCs by EPA Method 8260. Three of the soil borings will be converted to monitor wells. The wells will be constructed with two-inch diameter PVC with five feet of 0.02-inch slotted PVC screen across the water table and will be developed by pumping/surging upon installation. The well locations and/or screen depths may be adjusted based on observations noted during drilling. The wells will be constructed such that the curb box is flush with grade. Following a one to two week stabilization period, if LNAPL is detected, no samples will be collected and the product thickness will be measured. However, if no LNAPL is detected, groundwater samples will be collected in laboratory-supplied containers and shipped in accordance with appropriate EPA protocols to a NYSDOH-certified to be analyzed for the CP-51 list of VOCs by EPA Method 8260. In addition, for quality assurance/quality control (QA/QC) purposes, one trip blank will be sent per day with the collected samples for laboratory analysis but will be analyzed for VOCs only. Following delineation of the LNAPL, three 6-inch recovery

wells will be installed in borings using a hollow stem auger rig. The locations of the recovery wells will be dependent upon results of the initial boring/monitor well delineation testing. I found the scope of work acceptable with the following comments: 1) a geophysical survey must be conducted over all of the flat areas of the site. 2) all anomalies must be investigated and managed appropriately in accordance with State environmental regulations and the best industry wide practices. 3) the scope of work for managing the drums, tanks and cylinders is acceptable. However, AKRF must be prepared to manage any spilled materials and all acetylene cylinders must remain standing vertically at all times. 4) DEC must receive copies of all fully signed manifests for all disposed of materials. 5) the most contaminated soil sample must be submitted to the laboratory for analysis. 6) if free product is discovered, it must be collected weekly and the DEC must receive monthly reports containing the date of gauging, product thickness and the amount collected in gallons. 7) groundwater sampling must not take place sooner than 1 month after well development in order to allow disturbed groundwater with sediment to leave the vicinity of the well screen. 11/16/15 - Raphael Ketani. I reviewed the AKRF November 2015 Phase II Supplemental Spill Investigation Report dated 11/13/15. During September and October of 2015, the following activities took place: a geophysical survey of the site removal of all drums, pails, totes, acetylene and oxygen cylinders installed 20 soil borings and took soil samples installed, gauged and sampled 4 monitoring wells and removed product from all

affected wells Twenty (20) soil borings were installed on 9/14/15 and 9/15/15. These were borings SB-101 to SB-120. SB-119 and SB-120 were installed near the metallic anomaly that was found. The depths of the borings varied from 7 to 10 feet bgs. PID hits were from 5.6 ppm to 133 ppm. LNAPL was discovered in a number of the new borings. A geophysical survey was conducted on 9/14/15 using a GPR device and a metal detector. One metallic anomaly was discovered in the eastern part of the site and one non-metallic anomaly was discovered in the southwest part of the site. Drum disposal took place on 9/15/15 and 1207 gallons of LNAPL plus water were collected, along with 300 lbs. of solid waste. The material was sent to Clean Water of Staten Island, NY. Five (5) totes, seven 55 gallon drums, six 5 gallon buckest, two 30 gallons drums, 2 acetylene cylinders and 1 oxygen cylinder were also removed on 9/15/15. Four (4) wells were installed on 9/17/15 and 9/18/15 (MW-7 to MW-10). MW-10 was installed west of the magnetic anomaly. The drilling was advanced to 15 feet bgs at each well location. Groundwater was encountered at 8 feet to 11 feet bgs. Two inch diameter wells were installed with the screened interval extending from 5 feet to 15 feet below grade in each well. Groundwater was collected on 9/29/15 at MW-1, 3, 5 and 9. Wells MW-2, 4, 6 to 8 were gauged and product was found from 0.10' to 1.80'. The wells were again gauged on 10/19/15 and product was found at MW-2, 6 to 8 and 10 from 0.10' to 3.07'. Three gallons of product were collected at this time. Next, wells MW-2, 4, 6 to 8 and 10 were gauged on 10/27/15. Product thickness on this date varied from 0.05' to 1.42'. About 6.5 gallons of product was removed. For the soil samples, only VOCs were tested for. The sampling took place on 9/14/15 and 9/15/15. Three samples were entirely non-detect and 12 samples were mostly to almost entirely non-detect. Only 2 low exceedences were found amongst all of the results and these were from the SB-108 sample. The other samples had a few to many hits that were all below the CP-51 unrestricted soil standards. For the groundwater samples, only VOCs were tested for. The sampling took place on 10/19/15. Samples were collected from MW-1, 3, 5 and 9. The sample

from MW-5 was entirely non-detect. The samples from MW-1 and MW-9 were mostly non-detect with 140 ppb of benzene in the sample from MW-1. The hits in the samples from MW-1, 3 and 9 were below the TOGS 1.1.1 standards. AKRF recommended doing a pilot VEFR study at MW-2, 4, 6 and 8. They also recommended followup work of gauging the wells once a week for a month. In addition, they recommended doing a test pit at the location of the magnetic anomaly. I sent an email approving the report and the recommendations contained therein and requiring that AKRF also do a test pit at the location of the non-metallic anomaly. I explained that the dimensions of this anomaly suggested the presence of a UST vault. 12/14/15 - Raphael Ketani. I sent an email to Mr. Lynch, Ms. Lapin and Mr. Schwendt regarding when work will take place at the site. 12/15/15 - Raphael Ketani. Mr. Lynch responded to my 12/14/15 email. He stated that he was trying to confirm the work schedule. The consultants and contractors will be on site on Monday, December 21, 2015, in order to begin the well extractions and will continue until Wednesday with the excavation operations for the GPR sensed anomaly. 12/29/15 - Raphael Ketani. Ms. Lapin (646) 388-9520/mlapin@akrf.com sent me the following email - with an attached AKRF informational memo: AKRF completed a round of EFR in the monitor wells exhibiting free-phase product and investigated the area of the GPR survey s metallic anomaly (potential UST). As noted in the attached memo, no tank was discovered and the

test pit was backfilled. A sample of the groundwater from within the test pit was collected for fingerprint analysis. We plan to return to the site tomorrow to gauge the wells to determine the effectiveness of the first round of EFR. Our next memo will include these measurements and the results of the laboratory analysis of the test pit water sample. I reviewed the AKRF 12/29/15 Memo. Wells MW-1 to MW-10 were gauged on 12/21/15 and a test pit investigation of the metallic anomaly in front of the concrete silo was undertaken on the same day. Product was detected on the water table at wells MW-2, 4, 6, 7, 8, and 10. The thickness ranged from 0.02 feet to 2.88 feet, with MW-2 having 0.76 feet, MW-4 having 2.88 feet and MW-8 having 2.80 feet. Product was also discovered to be floating on the water table in the test pit. A total of 1274 gallons of mixed liquid (oil plus water) was collected from the wells and the test pit by vacuum truck. The test pit excavation revealed the presence of a 2 foot thick wire mesh reinforced concrete slab and a 6 inch diameter cast iron pipe running north-south. After the floating product was collected, the hole was simply backfilled. Groundwater sampling will take place on 12/30/15 at all wells which are free of product. Another round of VEFRing will be scheduled if there is significant product in the wells. Another informational memo will be sent to the DEC containing the groundwater analytical results and a fingerprint analysis of the oil. 1/14/16 - Raphael Ketani. Ms. Lapin (646) 388-9520/mlapin@akrf.com sent me an email today. She stated that VEFRing took place and then well gauging some time later. I reviewed the AKRF 1/14/16 Memo. Wells MW-1 to MW-10 were gauged on 12/30/15. Product was detected on the water table at wells MW-2, 4, 6, 7, 8, and 10. The thickness ranged from 0.11 feet to 3.42 feet, with MW-4 having 1.32 feet and MW-8 having 3.42 feet. Absorbent socks were installed in MW-2, 6, 7 and 10. A fingerprint analysis indicated that the product was either weathered #2 oil or diesel. AKRF proposes to install 6 inch diameter wells with oil skimmers which will run continuously. One well would replace MW-4 and would be installed to the north as MW-4a. The other well would replace MW-8 and would be installed southwest as MW-8a. AKRF states that there may be more product under the concrete slab of the former historic fuel storage

area. Because of this, they propose to conduct borings through the slab in order to determine the subsurface conditions and determine whether this area is the source of the oil in MW-8 and MW-4. If product is discovered, then a well will be installed in this area. I approved the Memo and the boring and well installation proposal contained therein. 5/20/16 - Raphael Ketani. As there has been no communication or submissions from Ms. Lapin ((646) 388-9520/mlapin@akrf.com) regarding the status of the site in 4 months, I sent her an email requesting an update. 5/23/16 - Raphael Ketani. I received an email today from Patrick Diggins of AKRF (646) 388-9784/jdiggins@akrf.com. He wrote the following: " Well Installation: Two non-aqueous phase liquid (NAPL) recovery wells (MW-11 and MW-12) were installed, and developed, at the site on April 20, 2016. The approximate well locations are presented on the attached well location map (Figure 1). AKRF gauged the wells on April 27, 2016, and found that MW-11 contained 1.82 feet of product and MW-12 contained 1.08 feet of product. " VEFR/Modified Pump Test: A vacuum enhanced fluid recovery (VEFR)/modified pump test was conducted on the product recovery wells (MW-11 and MW-12) on May 4, 2016. The two recovery wells were pumped with a vacuum truck for several hours, during which 225 gallons of liquid, including 45

gallons of product, were removed. The oily-water was disposed of at the Clean Water of New York in Staten Island, NY. The counter-signed manifest and facility ticket are attached. " Petroleum Skimmer Installation: AKRF will obtain an Abanaki PetroXtractor down-hole petroleum skimmer, on behalf of the Storage Deluxe. The skimmer will be installed in MW-11 in the coming weeks. If the skimmer proves effective at removing NAPL, a second skimmer will be obtained and installed in MW-12. 6/8/16 - Raphael Ketani. Justin Falls, Biologist I in the Marine Resources Division in Region 2, came to my cubicle this morning. He stated that he will put in the marine wetland permit the condition that no development can take place until the spill is resolved and the case is closed. I told him that this would be fine. Later, Mr. Falls sent me the development plans for the site. I reviewed them and had no comments. Lastly today, I sent an email to Ms. Lapin (mlapin@akrf.com) and c-c'd Mr. Novenstein (snovenstein@storagedeluxe.com), Mr. Tedesco (gtedesco@storagedeluxe.com) and Mr. Lynch (clynch@storagedeluxe.com) requesting a remedial progress update. 7/11/16 - Raphael Ketani. Patrick Diggins (jdiggins@akrf.com/(646) 388-9784) had sent an email last Friday with an update regarding progress at the site. In his email, he stated that he had a problem gaining access to the recovery wells in order to install the skimmers. I sent him an email asking what the access problem was. He responded by phone and said that, right now, the demolition crew was taking down all of the structures on site. This included two buildings, the coal silos and some concrete pads. The demolition company had placed some equipment in such as manner as to make it impossible to reach the wells. However, Mr. Diggins said that once the demolition is finished and the equipment is removed, then they will install the skimmers. 7/15/16 - Raphael Ketani. Yesterday, Mr. Diggins sent me the AKRF Interim Remedial Measure Work Plan memorandum dated 7/14/16. The document was signed by Michelle Lapin, P.E., Senior Vice President. The Interim Remedial Measure (IRM) will include 3 tasks. The first task will be to conduct exploratory excavations within the historic fuel storage area to identify and remove subsurface structures. This area includes the former 1,320,000 gallon UST area, the former coal silo area and the area between them. The second task will involve the removal of any product that is discovered. The third task concerns the

application of chemical oxidants in situ prior to backfilling of the excavation. However, this will depend upon the observed conditions. AKRF will provide oversight during all of the work and submit a document to the DEC after the work has been completed. I sent an email approving the IRMWP, but I stated that if stained soil is encountered, then the contamination must be excavated. Once the excavating has been finished, then end point samples must be taken in order to determine the concentrations of the contaminants (VOCs and SVOCs) with respect to the CP-51 unrestricted residential standards. If the results are still above the standards, then more excavating will have to take place. I added that applying treatment chemicals to an open excavation pit and then backfilling is not a DEC accepted practice. A deadline of one month from the completion of the work was set for the submission of the work report. Later, in response to my email, Mr. Diggins called me and stated that he wanted to clarify the IRMWP. He said that Storage Deluxe was not intending to conduct a large one pit excavation of the site at this time. He said that they just wanted to do random test pitting in order to see what lies beneath the surface material. I told him that this would also be

acceptable to the Department. Even later today, Mr. Diggins sent an email stating that exploratory test pitting will take place next week. 7/19/16 - Raphael Ketani. A meeting was called for by Michael Bogin (of Sive Paget and Riesel), the attorney for Storage Deluxe. He wanted the DEC to clarify the wetlands adjacent area issues and to explain the development tasks that are and will take place at the site. Also, in attendance were Reid Weppur and Chris Lynch, both from Storage Deluxe, Jessica Albin, DEC Assistant Regional Attorney and Lisa Horwitz from the DEC Region 2 Environmental Permits Division. Ms. Albin stated that Part 375 regulations do not apply to spills. She added that the executed Stipulation Agreement would give the State the leeway to allow development activity in the wetland adjacent area. Mr. Bogin stated that the regulation language indicates the site has to be part of the spills program. He added that they were not looking to put this project in the brownfields program. Ms. Albin stated that there is a way to move forward before issuing the permit. She added that she had sent information regarding the site and the spill project to the head of the Spills Program in Albany. She was waiting for an answer regarding whether the DEC had the leeway to allow activity in the wetlands via the Stipulation Agreement. Once she has the confirmation, then she can tell Mr. Bogin that Storage Deluxe can go ahead with their development work. Mr. Lynch said that the coal silos had been demolished, but they need clean fill in order to raise the site to 13 feet above mean sea level in order to prevent future storm damage. Mr. Lynch said that they will use the crushed concrete from the silos as fill since obtaining fill sand is very difficult right now due to the heavy construction and associated concrete demand in New York City. I asked Mr. Lynch for a report showing the chemical analysis of the concrete. Mr. Lynch stated that he will take a sample of the material. He added that the building itself will sit on piles. So the crushed concrete is only for site raising purposes. Ms. Albin stated that no additional permits will be required. Mr. Bogin stated that there will be a deed restriction for the site. I told Mr. Bogan that you cannot have a deed restriction for a spill project. Ms. Albin stated that the deed restriction would be under the wetland permit. With that, the meeting ended. Later today, the Stipulation Agreement was signed by Christopher Lynch, V.P. of Storage Deluxe, another representative of the company, and Randall Austin, Regional Spills Engineer, and executed. 7/29/16 - Raphael Ketani. Mr. Diggins

(jdiggins@akrf.com/(646) 388-9784) sent the following email: The excavation and environmental oversight teams mobilized to the site on Thursday (7/28/16) to begin the Interim Remedial Measures (IRM) described in our July 14, 2016 IRM Memorandum. During the two days on site the excavation crew dug two test pits in the central portion of the site, uncovering concrete foundation elements from historical structures as well as some petroleum-contaminated soil. The small amount of petroleum-contaminated soil (under 20 cubic yards) that was excavated from the site was stockpiled on plastic sheeting, and was properly covered and secured at the end of each day. This material will be disposed of at a permitted soil disposal facility, once approvals are in place. AKRF was on site during all site work, conducting air monitoring and documenting all activities. Some elevated PID readings were recorded; however, sustained ambient levels stayed below our action threshold of 5 parts per million throughout both days. IRM activities will resume on Monday (8/1/16). 8/5/16 - Raphael Ketani. Axel Schwendt of AKRF (aschwendt@akrf.com)

sent me the following email today: We finished work for the day and are pleased to provide you with the following update. We pumped out approximately 1,000 gallons of petroleum and contaminated water from test pits today, bringing the total amount removed to approximately 9,000 gallons. All final manifests will be provided to the NYSDEC. A roughly 2,000-gallon buried tank was encountered in the central portion of the site, within the area of contamination we are investigating, north of the historic 1,320,000-gal fuel storage area. See attached photos. Approximately 2,000 gallons of contaminated water were removed from the tank via vac truck. The tank was removed from the ground and the interior cleaned. There was significant corrosion and several small holes. This could have contributed to the observed contamination at the site. AKRF is preparing the proper submission to register/deregister the tank and will be preparing a closure report with the proper documentation, i.e., waste manifests, photographs, FDNY affidavit, etc. We will send you a map showing the location of the tank on Monday. I reviewed the pictures of the UST. There was nothing remarkable about the tank. 8/14/16 (Sunday) - Raphael Ketani. Mr. Diggins (jdiggins@akrf.com/(646) 388-9784) sent me the following email today: Here is an update of IRM activities at the 3068 Cropsey Ave site for last week (8/8/16 through 8/12/16): The excavation crew continued to dig test pits in the central portion of the site, uncovering concrete foundation elements from historical structures as well as some petroleum-contaminated soil. The petroleum-contaminated soil that was excavated from the site was stockpiled on plastic sheeting, and was properly covered and secured at the end of each day. This material will be disposed of at a permitted soil disposal facility, once approvals are in place. AKRF was on site during all site work, conducting air monitoring and documenting all activities. As one of the steps in achieving the remedial goal for this site, AKRF begun conducting some limited in-situ chemical oxidation (ISCO) via the test pits. KlozurCR, which is a combination of sodium persulfate and an engineered form of calcium peroxide, was applied directly into two test pits via the excavation contractor after excavating a hole the width of the excavator bucket and then mixed into the contaminated soil. As with all oxidants, proper protective equipment including face and dermal protection was worn at all times to prevent chemical burns. The oxidant was and will continue to be applied slowly to limit off-gassing of petroleum volatiles, chemical odors, and heat liberation as well as to ensure even distribution of the chemical oxidant in the treatment zone. IRM activities will resume on Monday

(8/15/16). We will continue to provide you with updates as the project progresses. 8/15/16 - Raphael Ketani. I reviewed the above information from the 8/14/16 email and sent a response email stating that simply placing treatment chemicals in test pits was not the proper way to remediate contaminated soil. I added that the contaminated soil probably extends underground in all directions and so the limited treatment in the test pits will not greatly affect the adjacent contamination. I finished the email by stating that Storage Deluxe and AKRF need to submit an ISCO treatment work plan with expected contamination mass and treatment chemical quantity calculations for addressing the extent of the below ground soil contamination. Lastly, I stated that chemical treatments should not start until all of the free product has been collected. Otherwise, you are treating the free product and the process will not end. Later, Mr. Diggins sent me an email today and called me today to

explain that the placing of the treatment chemicals in the test pits was simply PART of the IRM, not a solution to the subsurface contamination. He added that once the IRM is completed, then Storage Deluxe and AKRF will write and submit a work plan for remediating the site wide contamination. He added that the free product will be removed before any chemical treatments take place. Lastly, he stated that Storage Deluxe has acted appropriately at other sites and has always cleaned them up before conducting development. I told Mr. Diggins that the Department was being cautious about the placing of treatment chemicals into test pits because we have had other experiences when dealing with other owners and developers that they think this is all they have to do for remediating the site. I added that many developers are in too much of a rush to build on their sites and have the buildings occupied because time is money. Once the building is up, then it becomes very difficult to remediate the contamination, if ever complete the work at all. Mr. Diggins said that he understood such situations and he assured me that this will not happen at this site. With that, the conversation ended. 8/19/16 - Raphael Ketani. Mr. Diggins sent me an email update today. It was the same information as contained in the 8/14/16 update email with an added sentence indicating that the work will continue on 8/22/16. 8/25/16 - Raphael Ketani. Mr. Diggins sent me an email regarding an incident at the site. The contractor struck and damaged an unmapped fire hydrant service main. Water flowed to the central area of the site. A berm was constructed in order to keep most of the water from the contaminated soil stockpiles. One stock pile became a little wet at the bottom. The FDNY came and shut off the water pipe. There were no impacts to Coney Island Creek. AKRF monitors were on site during the whole incident. A little water with sheen was generated as a result of the wetting of the bottom of one of the stockpiles. Absorbent pads were used to collect the oil. The water receded overnight and the stockpiled soil was sent to Bayshore. No other areas of the site were affected by the sheen. 8/29/16 - Raphael Ketani. Mr. Diggins sent me the following email update today: Here is an update of IRM activities at the 3068 Cropsey Ave site for last week (8/22/16 through 8/26/16): The excavation crew continued to dig test pits in the central portion of the site, uncovering concrete foundation elements from historical structures as well as some petroleum-contaminated soil. The petroleum-contaminated soil excavated from the site was stockpiled on plastic sheeting, and was properly covered and secured as in previous weeks. In addition, loading and off-site transport of petroleum-contaminated soil began this week. A total of 28 truckloads of material was transported to the Bayshore Recycling Corp. facility in Keasbey, NJ. AKRF was on

site during all site work, conducting air monitoring and documenting all activities. AKRF continued conducting some limited in-situ chemical oxidation (ISCO) via the test pits this week. Klozur, a sodium persulfate compound, was applied directly into test pits via the excavation contractor, after excavating a hole the width of the excavator bucket, and then mixed into the contaminated soil. We are aware that the application of a chemical oxidant does not represent a final remedial action for the site, but rather a supplemental action to assist in the process of reducing product levels and facilitate groundwater extraction activities. Once this IRM is complete, we will work with all parties involved to develop a long term remedial strategy for the site. IRM activities have resumed this morning. We will continue to provide you with updates as the project progresses.

9/2/16 - Raphael Ketani. Mr. Diggins (jdiggins@akrf.com/(646) 388-9784) sent me the following email update: Here is an update of IRM activities at the 3068 Cropsey Ave site for this week (8/29/16 through 9/2/16): The excavation crew continued to dig test pits in the central portion of the site, uncovering concrete foundation elements from historical structures as well as some petroleum-contaminated soil. The petroleum-contaminated soil excavated from the site was stockpiled on plastic sheeting, and was properly covered and secured as in previous weeks. Ten truckloads of petroleum-contaminated soil was transported to the Bayshore Recycling Corp. facility in Keasbey, NJ. AKRF was on site during all site work, conducting air monitoring and documenting all activities. AKRF continued conducting some limited in-situ chemical oxidation (ISCO) via the test pits this week. Klozur was applied directly into test pits via the excavation contractor. We are aware that the application of a chemical oxidant does not represent a final remedial action for the site, but rather a supplemental action to assist in the process of reducing product levels and facilitate groundwater extraction activities. Once this IRM is complete, we will work with all parties involved to develop a long term remedial strategy for the site. IRM activities will resume, and likely conclude, on Tuesday (9/6/16). We will notify you when AKRF demobilizes next week. In the meantime, please feel free to reach out to me with questions. 9/19/16 - Raphael Ketani. On 9/16/16, Mr. Diggins sent me the following email: As of last week, Interim Remedial Measure (IRM) activities at 3068 Cropsey Avenue are complete. The following tasks were completed over the course of approximately one month: 1. An excavation crew dug test pits in the central portion of the site, uncovering concrete foundation elements from historical structures as well as some petroleum-contaminated soil. Petroleum-contaminated soil was temporarily stockpiled on site, and was later transported to the Bayshore Recycling Corp. facility in Keasbey, NJ. AKRF was on site during excavation, conducting air monitoring and documenting remedial activities. Photos of the IRM activities and copies of counter-signed manifests will be included in a pending report. 2. During test pit excavation, the crew uncovered a previously unidentified UST. The UST was cleaned, and removed from the site. As part of reporting for this IRM, the registration and tank closure documentation will be filed with NYSDEC, and copies of the UST recycling/scrap ticket manifests will be provided to NYSDEC. 3. The crew completed LNAPL removal from both the UST and from several test pits, using a vacuum truck. Copies of the counter-signed manifests for liquid disposal will be provided in a pending report. 4. AKRF conducted limited in-situ chemical oxidation (ISCO) via the test pits, using the chemical oxidant Klozur and KlozurCR. A full accounting of the volume of chemical oxidant applied during the IRM, will be included in a pending report. The

planned next steps for the site include: 1. Completion of an IRM summary report, with recommendations for future remedial actions. 2. Gauging of product recovery wells MW-11 and MW-12 3. Installation and operation of the Abenaki down-hole skimmer. I responded today to Mr. Diggins email, but stated that I had no comments. 11/10/16 - Raphael Ketani. I reviewed the AKRF Interim Remedial Measure Report dated 11/2/16. The remedial measures were the ones proposed in their 7/14/16 memorandum. The measures included exploratory test pitting, off site disposal of oil contaminated soil, removal of a UST, collection of LNAPL and application of oil remediation chemicals. A geophysical survey had been conducted on 9/14/15. A metallic anomaly

was found under the southeastern part of the site. A non-metallic anomaly was found under the center of the site. About 1207 gallons of an oil and water mixture and 300 pounds of solid waste were disposed of on 9/15/15. The oily water was sent to Clean Water of New York in Staten Island. From 9/14/15 to 9/15/15, 18 borings were installed in the areas of the wells which contained product. Two borings were conducted where a metallic anomaly had previously been detected. Twenty soil samples were sent to the lab for analysis. Four wells were installed between 9/17/15 and 9/18/15. These wells were gauged on 9/29/15. All of the site wells were gauged, product was collected and groundwater samples were taken on 10/19/15. Four groundwater samples were sent to the lab for analysis. Two LNAPL recovery wells were installed on 4/20/16. These wells were gauged on 4/27/16. MW-11 was found to have 1.82 feet of product and MW-12 was found to have 1.08 feet of product. A VEFR/modified pump test took place at the recovery wells on 5/4/16. A total of 225 gallons of liquid was recovered, which included 45 gallons of product. Between 7/28/16 and 9/9/16, 13 test pits were excavated within the historic fuel storage area of the site. Each test pit was about 20 feet wide by 110 feet long and 8 feet deep. All contaminated soil encountered was temporarily stockpiled and later disposed of. One five-point sample and one grab sample were collected for waste characterization analysis. Between 8/23/16 and 9/2/16, a total of 45 truck loads of contaminated soil consisting of 1388 tons was disposed of at Bayshore Soil Management. A previously unknown UST was discovered in the central part of the site during test pitting on 8/1/16. The tank capacity was 2000 gallons and contained oily water. The tank was removed by AARCO on 8/5/16. Nineteen hundred gallons of oily water were recovered and sent to Clean Water of New York in Staten Island. A total of 1100 gallons of oily water was also collected from various test pits. The tank was cleaned out, removed and added to the on site temporary scrap metal pile as cut up pieces. A PBS registration was submitted to the DEC for the tank. About 6000 gallons of oily water was removed from the test pits on 8/3/16. Another 1100 gallons was removed from the test pits on 8/5/16. Prior to backfilling, in situ chemical oxidation chemicals were placed in each test pit. A total of 1200 pounds of KlozurCR (sodium persulfate with calcium peroxide) was blended by backhoe into the soil. Staff from AKRF note that petroleum contamination is still present throughout the test pit area. AKRF recommends continued product gauging at MW-11 and MW-12. If the product persists, then skimmers will be installed in each well. If no product is found in the wells for two consecutive quarters, then treatment chemicals should be placed in the wells in order to reduce the groundwater analyte concentrations. A vapor barrier should be installed under the proposed storage building in order to protect the occupants from vapor intrusion. I reviewed Figure 2. It showed the IRM area to be in the southern half of the site. The IRM area abuts the coal silos at its southern limit. Eight test pits are shown

oriented northwest-southeast within the IRM area. Attachment A contained previous reports and correspondences. The 7/31/12 report contained pictures of the site when it was still a school bus storage facility. A 2012 Phase I was also part of this attachment. Attachment B consisted of the Alpha Analytical Lab soil raw data report for samples which were taken during 2016 for waste characterization analysis. Attachment C contained an approval letter from Bayshore Soil Management. Attachment D was a set of photos of the IRM site work and tank removal. Attachment E was the set of disposal manifests

for the contaminated soil. Attachment F was a set of water disposal manifests. Attachment G contains the AARCO tank closure affidavit. Attachment H is a copy of the PBS registration and tank closure notification. I finished my review of the report. I sent an email to Mr. Diggins (jdiggins@akrf.com/(646) 388-9784) stating that the State had approved the report and required Storage Deluxe to focus on free product removal as the primary goal for remediation. I added that Storage Deluxe and AKRF should be aware that vapors can travel up the walls of the proposed structure and enter the building this way. So the walls should also have at least some vapor barrier lining or else a passive vapor venting system may be the best option. 11/22/16 - Raphael Ketani. Mr. Diggins sent me an update email. He stated that a downhole skimmer was installed in recovery well MW-12 on 11/14/16. During the first six days of operation (only 8 hours per day), it recovered 50 gallons of LNAPL. Storage Deluxe will continue to operate the skimmer and monitor the results. Also, in the near future, the site will be connected to a permanent power supply and then a second skimmer will be installed in recovery well MW-1. From that point onward, round the clock skimming will take place. Information will be reported to the DEC on a regular basis. 1/3/2017 - Raphael Ketani. Mr. Diggins (646) 388-9784 sent me an email stating that the owner is proposing to install 10 mil Stego Wrap material below the at-grade slab as a vapor barrier. He asked whether the DEC will accept the use of this material. I responded by email and stated the following: There are many different vapor barriers on the market. The only requirements we have is that the material prevent the upward migration of vapors. This requires hiring a contractor to install the material who is knowledgeable about the specific material. Care must be taken so as not to exceed the tensile strength of the material, otherwise the liner will tear and the vapors will enter the building to be constructed above. If the material comes in sections, then it needs to be fixed together. This complicates matters as it may requiring fusing, or gluing the pieces together. Gluing is as problematic as fusing. Care must be taken so that the work is done right. Proper installation of the barrier is not a race. Seam samples must be taken and tested to standards in a lab. We must receive the results of these tests. If seams fail, then they need to be redone. Someone from AKRF who is knowledgeable about vapor barrier installation must be on site to witness and supervise the installation work. In the end, we will need a vapor barrier installation report. Remember that the site sits on meadow mat or organic silt at some depth below. This material generates hydrogen sulfide gas which is both toxic and explosive not to mention the methane that will migrate upward. The barrier must be able to resist degeneration as a result of contact with this gas. Mr. Diggins responded by email and stated that he will inform the DEC when the client is ready to begin installation. I responded by email and stated that this spill case is not closed and that product is still present in the wells. Product collection needs to continue. I asked him how building construction can start when remediation is not

finished and product collection may need to take place for many months. 1/4/2017 - Raphael Ketani. A conference call took place today at 10AM with Mr. Diggins (646) 388-9784 and Axel Schwendt, both of AKRF. Mr. Schwendt is the primary for the project and Mr. Diggins is the secondary and handles the day to day operations of the project. Mr. Schwendt stated that Stego will certify the liner installation. Mr. Diggins added that AKRF will be on site during the task and will

provide oversight. I mentioned that the site was built up over wetlands and so methane may collect under the building. Ventilation piping may be warranted. Mr. Diggins stated that the organic material within the footprint of the proposed building was removed some time ago down to 8 to 10 feet below grade. Mr. Schwendt mentioned that AKRF hasn't yet received the specs for the liner and that the plans for the building will be stamped by a P.E. Regarding the product collection, Mr. Diggins stated that the 2 recovery wells are downgradient from the proposed building location and will be unaffected by the construction. Product collection will take place as long as is necessary. I asked about whether more tanks were discovered on site. Mr. Diggins said that only 1 tank was discovered during the test pitting and the GPR survey. It was cleaned out and removed some time ago. As far as they know, there are no more tanks. He added that he felt confident the source material had been removed. Later, Mr. Diggins sent an email summarizing the discussion that took place during our phone conversation. 2/2/17 - Raphael Ketani. Mr. Diggins (jdiggins@akrf.com/(646) 388-9784) sent me an email today. He stated the following: Since our last communication with you on January 4, 2017, we have relocated the Abenaki PetroXtractor down-hole skimmer to recovery well MW-11 at the 3068 Cropsey Avenue site. The skimmer was first installed in MW-12 and was run during business hours between November 14, 2016 and January 3, 2017. In that time, we recovered approximately 105 gallons of light non-aqueous liquid (LNAPL), or roughly a half gallon per hour; however, recovery was higher initially and dropped over time. Since skimming began in MW-11 we have recovered another 105 gallons of LNAPL! Based on the operation schedule, the average recovery was 1.9 gallons per hour. We expect that recovery will drop over time, as it did in MW-12; however, we will continue to run the skimmer and report the results to you regularly. In the coming weeks, the site will be connected to a permanent power supply, at which point a second skimmer will be installed in recovery well MW-12, as was previously proposed. In addition, once a permanent power supply is in place we will begin round-the-clock skimming operations from both recovery wells. We will track LNAPL recovery from both locations, and report those quantities to you. In addition to skimming operations, the construction team on site will begin installing the StegoWrap 10-mil vapor barrier next week. AKRF will be overseeing and documenting the installation, as requested, and will provide photo documentation in an email update soon. I responded by email and told Mr. Diggins to send email updates regarding progress at the site. 4/11/17 - Raphael Ketani. Mr. Diggins sent me the following email: Since our last communication with you in February, our client has installed the StegoWrap 10-mil vapor barrier beneath the at-grade slab of the new building currently under construction at 3068 Cropsey Avenue. The vapor barrier was installed per factory specifications by a seasoned installation contractor (Scalpel Contracting, Inc.). AKRF conducted multiple site visits to inspect the installation process and provide feedback. Following installation, the manufacturer provided the attached certification letter for the vapor barrier. In addition, the oil skimming operation in recovery well MW-11 is ongoing. The well continues to be

productive (removing approximately 1 gallon per hour on average), and over 200 gallons of product have been removed so far. In the coming weeks, the site will be connected to a permanent power supply, at which point a second skimmer will be installed in recovery well MW-12, as was previously proposed. In addition, once a permanent

power supply is in place we will begin round-the-clock skimming operations from both recovery wells. We will track LNAPL recovery from both locations, and report those quantities to you. Mr. Diggins also attached a letter from Stego Industries, Inc. asserting to the quality of the vapor barrier as per various ASTM testing standards. Pictures of the vapor barrier with the rebar installed on top before the concrete floor was poured were included with the letter. 7/10/17 - Raphael Ketani. Mr. Diggins (jdiggins@akrf.com/(646) 388-9784) sent me the following email: Since our last communication with you on April 11, 2017, we have relocated the Abenaki PetroXtractor down-hole skimmer to recovery well MW-12 at the 3068 Cropsey Avenue site. The skimmer was first installed in MW-12, and was later moved to MW-11 after recovery dropped significantly in MW-12. The skimmer operated in MW-11 between January 26 and June 26, 2017, and recovered approximately 1,100 gallons of LNAPL! Based on the operation schedule, the average recovery was 1.9 gallons per hour. Recently, recovery in MW-11 has dropped significantly, so our crew moved the skimmer back to its original location (MW-12). Prior to installation, our crew measured the LNAPL thickness in MW-12 to be approximately 1.9 feet thick. We will continue to run the skimmer in MW-12, and we will provide another update soon. 8/18/17 - Raphael Ketani. Mr. Diggins sent me a progress update for the site by email. He wrote the following: Our down-hole skimming effort at 3068 Cropsey Avenue has been successful. Since November 2016, the PetroXtractor XL has removed over 1,200 gallons of product from wells MW-11 and MW-12. As a result of these efforts, product recovery in the wells has shrunk to near unmeasurable levels, which suggests that we have removed the bulk of the product from the Site. Given the extremely low recoveries (hundredths of a gallon of product recovery per month), we feel that the down-hole skimmer is not effective at this time. Therefore, we recommend ending the down-hole skimming operation in wells MW-11 and MW-12, replacing it with an absorbent sock in each well, and monitoring/replacing the socks periodically until such a time that the wells have ceased to produce measurable product levels. I responded by email approving the decision to end skimming and to use absorbent socks in the wells. However, I wrote that AKRF should monitor the socks in the beginning phase of the application in order to see how often the socks need changing. 10/17/17 - Raphael Ketani. Mr. Diggins (646) 388-9784 and Mr. Schwendt called me today in a conference call. Mr. Schwendt talked for AKRF. He explained that AKRF had gone to the site in order to see how much product had been collected. They found that nothing was in the holding tank. They checked the skimmer at one well and found it to be defective. Also, the well did have product. Construction of the storage facility is continuing. However, the well may be destroyed by the construction activities. If it is, then AKRF will move the well over a few feet and re-install it. I told Mr. Schwendt that this was alright. He then said that a refurbished skimmer would be installed in the well. They will return to the site later in order to make sure the skimmer is collecting product. I told Mr. Diggins and Mr. Schwendt that this plan sounded fine. With that, the call ended. 10/27/17 - Raphael Ketani. Axel Schwendt (646) 388-9529/aschwendt@akrf.com) and Patrick Diggins (jdiggins@akrf.com/(646) 388-9784) called me today to discuss progress at the site. They said that construction of the storage

building had destroyed the recovery wells. They wanted to know whether it would be acceptable to the Department to install concrete drywell piping as well riser and screen at each destroyed well

location. They said that the pipe inside diameter would be 4 feet. I told them that the Department had no objections regarding replacing the PVC wells with concrete piping. The only condition I set was that the oil will have to be able to get into the concrete wells no matter the water table elevation. There would have to be either vertical lines of holes through the walls of the pipes or wide vertical slits. Mr. Schwendt and Mr. Diggins said that this would be done. With that, the conversation ended. 3/5/18 - Raphael Ketani. As there have been no progress updates or reports submitted by Storage Deluxe or AKRF, I sent an email to Mr. Tedesco (gtedesco@storagedeluxe.com), Mr. Lynch (clynch@storagedeluxe.com), Mr. Schwendt [(646) 388-9529/aschwendt@akrf.com] and Mr. Diggins [jdiggins@akrf.com/(646) 388-9784)] requesting the information. 3/8/18 - Raphael Ketani. Yesterday, I received an email from Mr. Diggins. The email contained information regarding the current activities at the site. Presently, the self storage building is still being constructed. Once construction is completed, then Storage Deluxe will give the property to the new operator. This is supposed to happen in several weeks. Construction along the creek was recently completed. Due to the construction, AKRF has not had access to the monitoring wells in several weeks. Thus, no product collection has taken place. Mr. Diggins also proposed a work plan in the text of the email. AKRF will visit the site next week to relocate the wells and gauge them. The belt will be replaced on the down hole skimmer and then it will be installed in MW-11 or MW-12. This will happen in the next 2 or 3 weeks. AKRF will purchase 1 or 2 more skimmers and install them in other wells so that product recovery can take place in multiple wells. Once skimming resumes, AKRF will provide monthly and quarterly update reports. I approved the work plan in a response email. 05/03/18: This spill case transferred from R. Ketani to J. Kolleeny. - JK 05/04/18: Received call from Patrick Diggins of AKRF, Inc. (RP's consultant), who explained that they had sent an email to former DEC PM, Ketani, regarding changes in product recovery equipment at site. Patrick forwarded email to me: Raphael, Since our last communication with you on March 16, 2018, we have obtained a new Abenaki PetroXtractor down-hole skimmer, repaired our existing skimmer, and installed devices in recovery wells MW-11B and MW-12B at 3068 Cropsey Avenue site. Our repair & install'n was completed on 4/24/18. Skimmers were installed in two sheds constructed to house skimmers and recovered product tanks. I have attached two photos (interior & exterior views) for reference. Skimmers are now up & running. We will be inspecting operation on a regular basis, and will provide you (or your successor) with an update about recovery volumes in coming weeks. Please feel free to reach out to me with any questions. Photos in DecDocs. - J. Kolleeny 06/06/18: Received email from Patrcik Diggins of AKRF: Jonathan, Since our last communication with you on 5/4/18, we have been running two Abenaki PetroXtractor down-hole skimmers in recovery wells MW-11B & MW-12B at 3068 Cropsey Avenue site. Skimmers have been recovering significant quantities of product when in operation, and as a result we had to empty recovery containers. Aarco Envt'l Services, Inc. came to site on 5/21/18, and removed 475 gals of recovered product with a vacuum truck. AKRF performed a site inspection on 5/24/18. Skimmers were in operation during inspection, and a small amount of product (approx 5 to 10 gals) had already been recovered. I have attached two photos from inspection for reference. We will be inspecting operation again

during next fiscal quarter, and will provide you with update about

recovery volumes at that time. Please feel free to reach out to me with any questions. Photos in DecDocs. - J. Kolleeny 07/16/18: Received email from Patrick Diggins of AKRF: Jonathan, Since our last communication with you on 6/6/18, we have been running one Abenaki PetroXtractor down-hole skimmer in recovery well MW-11B at 3068 Cropsey Avenue site. AKRF completed a site inspection on 6/28/18, and found that LNAPL was not being recovered in well MW-12B due to diminished levels. So, we are allowing well to recover for month, and we will inspect it again on our next visit and resume skimming operations if product has returned. Skimmers have recovered significant quantities of product since we resumed operations in May 2018, and as a result we had to empty recovery containers a second time. Aarco Envt'l Services, Inc. came to site on 7/10/18 and removed 555 gals of recovered product with a vacuum truck, bringing total recovered volume in 2018 to 1,030 gals. We will be inspecting operation again in late July 2018, and will provide you with an update about recovery volumes at that time. Please feel free to reach out to me with any questions. - J. Kolleeny 07/27/18: On 7/17/18, I sent email to Patrick Diggins of AKRF: Patrick, Thank you for your regular updates on this project, I wanted to let you know that I am receiving these updates and entering information into our database. I have a question: Does AKRF ever prepare formal rpts documenting site activities, with data tables and site plans, water table maps, etc., or have you only been sending project update emails for duration of this project? If not, I think it might be a good idea to prepare & submit quarterly or semi-annual progress rpts summarizing data in your emails, with site plans showing recovery well locations, GW flow direction, etc., and also providing some background information regarding spill history. Please let me know your thoughts on this. On 7/20/18, Patrick sent reply: Jonathan, I have spoken with our client, and they have authorized us to complete two semi-annual letter rpts for this project. We began latest round of petroleum skimming and reporting activities in May 2018, so half year mark would be Nov. 2018. Is that an acceptable time-frame for first rpt? We're flexible, so please let us know. On 7/26/18, I sent reply: Patrick, Yes, submission of first semi-annual remedial progress letter rpt in Nov. 2018 is an acceptable target date, with following semi-annual rpt to be submitted in May 2019. On 7/27/18, Patrick sent reply: Jon, Sounds good. - J. Kolleeny 09/24/18: Received email from Patrick Diggins of AKRF: Jonathan, Since our last communication with you on 7/27/18, we have been running two Abenaki PetroXtractor down-hole skimmers intermittently (based on product levels) in recovery wells MW-11B and MW-12B at 3068 Cropsey Avenue site. AKRF completed site inspections on 7/31 & 8/27 2018. During most recent inspection, ~343 gals of recovered product had collected in two recovery vessels, and both skimmers were in operation. Volume stored on-site at time of our August inspection brought total recovered volume in 2018 to ~1,370 gallons. Two pictures from our recent inspection are attached. We will be conducting inspections later in Sept. 2018 and in Oct. 2018, and will be completing a biannual rpt in Nov. 2018, as requested. Please feel free to reach out to me with any questions. - JK 02/26/19: Reviewed Biannual Rpt, January 2019 by AKRF dated 1/10/19 (in DecDocs). Rpt states that in March 2018, two recovery wells (MW-11B & MW-12B) were installed at approx locations of original recovery wells, which were destroyed during construction activities, and Abanaki PetroXtractor down-hole skimmers were installed in these wells in April 2018. Between May & Oct. 2018, ~1,030 gals of oily

water were disposed off-site. AKRF performed monthly gauging of two

LNAPL wells (East Well & West Well) between July & Oct. 2018. On 7/13/18, well MW-11B had 0.14 ft of LNAPL and MW-12B had 0.09 ft; on 8/27/18, MW-11B had 0.38 ft of LNAPL and MW-12B had 0.42 ft; on 9/26/18, well MW-11B had 0.07 ft of LNAPL and MW-12B had 0.09 ft; on 10/31/18, MW-11B had 0.11 ft of LNAPL and MW-12B had 0.09 ft. Rpt concludes that residual contamination is still present at site and AKRF will continue to gauge & monitor LNAPL recovery wells. - J. Kolleeny 02/26/19: I sent email to J. Patrick Diggins of AKRF: Patrick, I ve reviewed January 2019 Biannual Rpt for this spill site, and have a few questions. First, what was historic site use, and what is current site use? If you could include this information in Background section of future biannual rpts, that would be helpful. Figure 2 in rpt, Site Plan and NAPL Well Locations, shows wells in various colors grey, red and black; can figure s legend be modified to indicate which of these wells still exist and which have been destroyed? Are only currently existing wells MW-11B and MW-12B? If so, I think some delineation wells may be needed to define extent of NAPL plume. Also, it appears that MW-11B & MW-12B are located about 80 ft apart; it might be worthwhile to install another recovery well between those two wells to help expedite NAPL recovery. Recovery wells seem to be located very near shoreline of Coney Island Creek; is there a bulkhead along shore? Does AKRF inspect water for petroleum sheen during monthly well gauging visits? Is there an absorbent boom in place along shoreline to contain any NAPL that might be discharging to creek?Finally, has any dissolved-phase GW sampling ever been conducted at site? If so, was any dissolved contamination found? If not, are there any existing wells that don t contain NAPL that could be sampled for dissolved impacts? My apologies if all this was common knowledge to previous DEC case manager, Raphael Ketani. Please feel free to call to discuss. - J. Kolleeny 03/14/19: Spoke with Patrick Diggins and Axel Schwendt of AKRF regarding my 2/26/19 email (see above entry). They explained that only two active wells remain on-site, MW-11B and MW-12B (both large recovery wells with belt skimmers to recover LNAPL, which is no. 2 fuel oil). They will revise Fig. 2 in future rpts to indicate which wells are active. Site was formerly a Major Oil Storage Facility with a 1,320,000-gallon fuel storage area (platform area), now occupied by a storage space facility. Some remediation, including ISCO and excavation, was done during site redevelopment. AKRF believes southern extent of NAPL plume was delineated, but they agreed that there may still be some NAPL to north of MW-12B in area of former well MW-2. They indicated they'd be willing to install a delineation well there. They said they will have to research site history for any dissolved-phase GW sampling data; I said even if they find historical GW data showing no major dissolved impacts, I will need to see up-to-date GW data in support of a spill closure request, including sampling of well(s) from which LNAPL has been eliminated. They understood this point. They stated that in past few months, product thicknesses and recovery have greatly decreased and they are switching from monthly site visits to quarterly based on an understanding with former DEC case manager Ketani. Since they continued monthly monitoring throughout 2018 (long after Ketani's retirement), I suggested they submit a brief formal proposal to change from monthly to quarterly monitoring. It was agreed that after discussing with their client, they will submit a work plan for a delineation well and a request to reduce monitoring schedule to

quarterly. - JK 04/16/19: On 4/15/19, I sent an email to Patrick Diggins of AKRF: Patrick, I wanted to follow-up on our conversation in March regarding this spill site. According to my notes, you were

going to discuss with your client possibility of preparing a work plan for install'n of an addt'l well to better delineate free product at site, and you were going to submit a proposal to change site monitoring schedule (monthly to quarterly). Any update? Please let me know. On 4/16/19, received reply from P. Diggins: Jonathan, We are currently revising our biannual rpt to include addt'l details about site history (per your request), and including a petition to reduce our inspections to quarterly instead of monthly. We will have that over to you soon. We spoke with our client after our phone conversation and they would like to stay course on current remedial strategy, and continue to skim petroleum from recovery wells MW-11B & MW-12B until wells no longer produce free-phase product. Once that benchmark is achieved, we can discuss requirements for achieving spill closure at Site. Is that acceptable to NYSDEC? Please feel free to reach out to Axel or myself to discuss. I sent reply: Patrick, Thanks for getting back to me. I am not asking for a change to current remedial strategy, which involves using belt skimmers to recover free product. However, it is standard practice to require adequate delineation of a free product plume. I believe when we spoke, you mentioned that one of wells to north of recovery well MW-12B had free product (I don t recall if you said it was MW-7 or MW-2; I think latter). I will not be able to close out spill without knowing that area impacted by free product has been delineated and addressed. If only two existing wells at site both contain free product, then plume has not been zeroed-out. Ideally, wells should be installed both to north & south of currently impacted wells. But based on our discussion, at this time I'm more interested in putting in a well to north of MW-12B. If you install addt'l well and product is detected, then it would make sense to also install a skimmer in that well to expedite product recovery efforts. If no product is found in new well, then we have confirmed northern extent of product plume. Perhaps you can also remind me why you felt a delineation well was not necessary to south of existing well MW-11B (was product successfully eliminated from wells MW-6 & MW-10 before they were destroyed?), and also remind me about whether any dissolved-phase GW sampling has been done at site. Please feel free to call to discuss. - JK 04/23/19: Received email reply from Patrick Diggins of AKRF: Jonathan, We understand that delineating all NAPL areas is required for spill closure. We will raise your concern with our client again. In meantime, we'll revise biannual rpt and get that over to you. On your second question, we have delineated spill to south of current recovery wells, including soil borings and excavation and product removal during foundation construction. I've attached our figure to this email. Soil borings/wells with a history of NAPL are highlighted on map in red. Thanks for working with us on this. We'll be in touch with you again soon. I later received another email from P. Diggins: Jonathan, Our client would like to sit down with you to discuss Cropsey Avenue spill. Would you be available for a meeting at your office next week? If so, we can propose some dates and times for that meeting. Please let me know. Arranged meeting for May 8, 2019. - J. Kolleeny 05/21/19: Received & reviewed Revised Biannual Rpt by AKRF, dated 5/21/19 (in DecDocs). Rpt presents mostly same data and text as Biannual Rpt dated 1/10/19, but includes two more gauging events in data table, showing that on 1/11/19, recovery well MW-11B had 0.02 ft

of LNAPL and well MW-12B had 0.01 ft, and on 3/21/19 well MW-11B had 0.13 ft of LNAPL and MW-12B had 0.02 ft. Rpt also includes expanded Conclusions and Recommendations section, stating that AKRF will continue LNAPL recovery from well MW-11B, as needed; perform site inspections and recovery well gauging on a quarterly basis; and

advance an exploratory soil boring on northern portion of site, near former well MW-2, to confirm extent of LNAPL plume; if LNAPL is observed in boring, then a recovery well will be installed to remove LNAPL from this area. I sent email to J. Patrick Diggins of AKRF, cc's to Axel Schwendt of AKRF and to Chris Lynch & Jonathan Orr of Storage Deluxe (RP): Patrick, Thank you for revising Biannual Rpt for this spill site. Proposed boring/well location is fine, but text states that you will drill a soil boring at that location and look for LNAPL, and only install a well if LNAPL is observed in boring. I believe a temporary well point should be installed in boring, and sufficient time should be given to allow GW to fully enter temporary well and come to equilibrium. This seems to me like a more definitive way to determine if LNAPL is present on water table at that location. I also have a question about Conclusions and Recommendations section of revised rpt, which states that AKRF will continue LNAPL recovery only from well MW-11B, as needed. Has LNAPL been completely eliminated from recovery well MW-12B? If not, then LNAPL removal should continue from both recovery wells. You can consider this email as an approval of proposed boring/well install'n, with modification that a temporary well point should be installed within boring to evaluate presence of LNAPL. You should also maintain a boring log while advancing boring. Please feel free to contact me if you have any questions or wish to discuss this further. I received email reply from Patrick: Jonathan, Thanks for quick response! If we don't identify LNAPL in boring we will install a temporary monitoring well at that location, and update you on results of install'n and follow-up gauging event. We will also complete boring log (and well construction log if necessary), per our standard procedure. On recovery in wells MW-11B & MW-12B, we will continue to recover product from MW-11B as that well had 0.13 inches [sic] of product during our last inspection. We will also continue to gauge MW-12B during our inspections and resume product recovery if necessary. Please let us know if you have any other questions or concerns. Thanks! I replied: Patrick, Okay, that all sounds good. - J. Kolleeny 06/27/19: On 6/25/19, had phone conversation with Patrick Diggins of AKRF, who stated they drilled addt'l boring & installed temporary well to delineate northern extent of LNAPL plume, and didn't observed soil contamination or sheen/odors in temporary well. On 6/27/19, received email from Patrick: Jonathan, Thanks for speaking with me other day! Here is a summary of our conversation: 1. Per your request, a soil boring was advanced and monitoring well (MW-13) was installed near location of former monitoring MW-2 within parking lot of 3068 Cropsey Ave Site. Gross contamination was not observed in soil cores. Monitoring well was developed after install'n, and odors and/or petroleum sheen were not observed in development liquid. 2. Following development, monitoring well was left to stabilize. AKRF returned after one week to gauge well. No PID hits were detected at wellhead, and no product was detected by down-hole oil-water probe. 3. While on-site, AKRF conducted our quarterly inspection of two existing recovery wells (MW-11B and MW-12B). Wells were found to contain only trace amounts of product on GW surface (between 0.1 and 0.4 inches). Given low levels of product in wells, down-hole skimmers would not be an effective tool for product recovery; therefore, AKRF will install oil-absorbent socks in wells and continue quarterly inspections. If product levels were to recover over coming months, down-hole skimming operation would resume. 4. AKRF will report findings/observations of our Q3 site inspection to NYSDEC in coming weeks. Please feel free to reach out to me with any questions or concerns. I sent email reply: Patrick, It was nice speaking with you

other day. Thank you for summary of our conversation. I m very glad to hear that contamination was not observed in boring/well installed to delineate northern extent of LNAPL plume at site. Just to reiterate, DEC approves actions AKRF is proposing for site: install'n of oil-absorbent socks in wells impacted with LNAPL and continued quarterly inspections. Based on inspections, absorbent socks should be replaced as necessary. And as you ve noted, if product levels increase over coming months in response to this change in recovery approach, AKRF should resume down-hole skimming operations. - J. Kolleeny 07/08/19: Received email update from J. Patrick Diggins of AKRF: Jonathan, AKRF completed planned Q3 inspection of recovery wells at 3068 Cropsey Ave Site (DEC Spill No. 1302469) on 7/5/19. Two wells (MW-11B & MW-12B) contained trace amounts of product (0.005 inches & 0.03 inches, respectively), which is consistent with levels observed during Q2 inspection. Oil-absorbent socks were installed within wells. AKRF will return to Site in fall to complete Q4 inspection, and will update you at that time. For now, please let me know if you have any questions or concerns. - JK "

Remarks: "Associated with historical spill# 9206921.. Caller advised has spoken with Kumar Patel reference to these historical spills."

All Materials:

Site ID:	482905
Operable Unit ID:	1232632
Operable Unit:	01
Material ID:	2231471
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	500.00
Units:	G
Recovered:	Not reported
Oxygenate:	Not reported